

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 97-NM-49-AD; Amendment 39-11224; AD 99-15-05]

RIN 2120-AA64

Airworthiness Directives; McDonnell Douglas Model DC-9-10, -20, -30, -40, and -50 Series Airplanes, and C-9 (Military) Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; correction.

SUMMARY: This document corrects information in an existing airworthiness directive (AD) that applies to certain McDonnell Douglas Model DC-9-10, -20, -30, -40, and -50 series airplanes, and C-9 (military) airplanes. That AD currently requires a one-time visual inspection to determine if all corners of the aft lower cargo doorjamb have been previously modified. That AD also requires low frequency eddy current inspections to detect cracks of the fuselage skin and doubler at all corners of the aft lower cargo doorjamb, various follow-on repetitive inspections, and modification, if necessary. This amendment corrects two typographical errors involving reference to a certain Principal Structural Element (PSE) and correction of a compliance time. This correction is necessary to ensure that the correct PSE is inspected, and that an appropriate period of time is permitted for compliance with a certain inspection.

DATE: Effective August 18, 1999.

The incorporation by reference of certain publications listed in the regulations was approved previously by the Director of the Federal Register as of August 18, 1999 (64 FR 37838, July 14, 1999).

FOR FURTHER INFORMATION CONTACT: Wahib Mina, Aerospace Engineer, Airframe Branch, ANM-120L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712; telephone (562) 627-5324; fax (562) 627-5210.

SUPPLEMENTARY INFORMATION: On July 7, 1999, the Federal Aviation Administration (FAA) issued AD 99-15-05, amendment 39-11224 (64 FR 37838, July 14, 1999), which applies to certain McDonnell Douglas Model DC-9-10, -20, -30, -40, and -50 series airplanes, and C-9 (military) airplanes. That AD requires a one-time visual inspection to determine if all corners of the aft lower cargo doorjamb have been previously modified. That AD also requires low frequency eddy current inspections to detect cracks of the fuselage skin and doubler at all corners of the aft lower

cargo doorjamb, various follow-on repetitive inspections, and modification, if necessary. That AD was prompted by fatigue cracks found in the fuselage skin and doubler at the corners of the aft lower cargo doorjamb. The actions specified by that AD are intended to detect and correct such fatigue cracking, which could result in rapid decompression of the fuselage and consequent reduced structural integrity of the airplane.

Need for the Correction

The FAA has noted that a typographical error exists in paragraph (d) of the existing AD that involves the compliance time for performing a high frequency eddy current (HFEC) inspection to detect cracks on the skin adjacent to a certain modification of the corners of the right lower cargo doorjamb. That AD specified that the HFEC inspection should be performed "prior to the accumulation of 28,000 landings since accomplishment of that modification, or within 3,500 landings after the effective date of the AD." However, the intent of the FAA was to specify "prior to the accumulation of 28,000 landings since accomplishment of that modification, or within 3,575 landings after the effective date of the AD." Paragraph (d) of the existing AD has been revised to correctly specify 3,575 landings.

Additionally, a typographical error occurred in the identification of the Principle Structural Element (PSE) specified in paragraph (e) of the existing AD. The PSE was identified as "PSE 53.09.033;" however, the appropriate number for the PSE should have been identified as "53.09.035;" That correction has been included in this AD.

Correction of Publication

This document corrects the typographical errors in AD 99-15-05, and correctly adds the AD as an amendment to section 39.13 of the Federal Aviation Regulations (14 CFR 39.13).

The final rule is being reprinted in its entirety for the convenience of affected operators. The effective date of the AD remains August 18, 1999.

Since this action only identifies the appropriate PSE to be inspected and corrects a compliance time (which actually extends the compliance period somewhat from the existing AD), it has no adverse economic impact and imposes no additional burden on any person. Therefore, the FAA has determined that notice and public procedures are unnecessary.

List of Subject in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Correction

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Corrected]

2. Section 39.13 is amended by correctly adding the following airworthiness directive (AD):

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 97-NM-49-AD; Amendment 39-11224; AD 99-15-05]

RIN 2120-AA64

Airworthiness Directives; McDonnell Douglas Model DC-9-10, -20, -30, -40, and -50 Series Airplanes, and C-9 (Military) Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to certain McDonnell Douglas Model DC-9-10, -20, -30, -40, and -50 series airplanes, and C-9 (military) airplanes, that requires a one-time visual inspection to determine if all corners of the aft lower cargo doorjamb have been previously modified. This amendment also requires low frequency eddy current inspections to detect cracks of the fuselage skin and doubler at all corners of the aft lower cargo doorjamb, various follow-on repetitive inspections, and modification, if necessary. This amendment is prompted by fatigue cracks found in the fuselage skin and doubler at the corners of the aft lower cargo doorjamb. The actions specified by this AD are intended to detect and correct such fatigue cracking, which could result in rapid decompression of the fuselage and consequent reduced structural integrity of the airplane.

DATES: Effective August 18, 1999.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of August 18, 1999.

ADDRESSES: The service information referenced in this AD may be obtained from The Boeing Company, Douglas Products Division, P.O. Box 1771, Long Beach, California 90846-1771, Attention: Business Unit Manager, Contract Data Management, C1-255 (35-22). This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington; FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Wahib Mina, Aerospace Engineer, Airframe Branch, ANM-120L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712; telephone (562) 627-5324; fax (562) 627-5210.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an airworthiness directive (AD) that is applicable to certain McDonnell Douglas Model DC-9-10, -20, -30, -40, and -50 series airplanes, and C-9 (military) airplanes, was published in the Federal Register on August 11, 1997 (62 FR 42949). That action proposed to require a one-time visual inspection to determine if all corners of the aft lower cargo doorjamb have been previously modified. That action also proposed to require low frequency eddy current inspections to detect cracks of the fuselage skin and doubler at all corners of the aft lower cargo doorjamb, various follow-on repetitive inspections, and modification, if necessary.

New Service Information

Since the issuance of the NPRM, McDonnell Douglas has issued Service Bulletin DC9-53-278, Revision 01, dated April 29, 1999. That service bulletin removes reference to a low frequency eddy current inspection after doubler installation and changes the inspection to a high frequency eddy current inspection. Other administrative changes were also included in the revised service bulletin.

Consideration of Comments

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the comments received.

Support for the Proposal

One commenter supports the proposal.

Request To Allow Designated Engineering Representative (DER) Approval of Certain Repairs

One commenter requests that, rather than require approval of Manager of the Los Angeles Aircraft Certification Office (ACO) for certain repairs [cracking conditions beyond the allowable repair limits specified in the proposal, and for existing repairs that are not accomplished in accordance with the DC-9 Structural Repair Manual (SRM) or Service Rework Drawings], a Boeing/Douglas Aircraft Division Designated Engineering Representative (DER) be designated with the authority to approve such repairs temporarily. The commenter states that this would expedite the approval process yet ensure an adequate level of safety since the Manager of the Los Angeles ACO would have final authority to approve the repair as a permanent repair. The commenter states that if the FAA does not approve the temporary repair as a permanent repair, it could then require any corrective action to be accomplished, preferably at the next scheduled major maintenance check.

The FAA does not concur. While DER's are authorized to determine whether a design or repair method complies with a specific requirement, they are not currently authorized to make the discretionary determination as to what the applicable requirement is. However, the FAA has issued a notice (N 8110.72, dated March 30, 1998), which provides guidance for delegating authority to certain type certificate holder structural DER's to approve alternative methods of compliance for AD-required repairs and modifications of individual airplanes. The FAA is currently working with The Boeing Company, Long Beach Division (BLBD), to develop the implementation process for delegation of approval of alternative methods of compliance in accordance with that notice. Once this process is implemented, approval authority for alternative methods of compliance can be delegated without revising the AD.

Request to Revise Paragraph (c) of the Proposed AD

One commenter requests that paragraph (c) of the proposed AD be revised to read as follows:

"(c) If the visual inspection required by paragraph (a) of this AD reveals that the corners of the aft lower cargo doorjamb have been modified by FAA-approved repairs other than the DC-9 SRM or Service Rework Drawing, prior to further flight, accomplish an initial Low Frequency Eddy Current (LFEC) inspection of the fuselage skin adjacent to the repair.

(c)(i) If no cracks are detected, within (6) months after the initial LFEC inspection, accomplish a repair approved by the Manager, Los Angeles ACO.

(c)(ii) If cracks are detected, prior to further flight, repair in accordance with a method approved by the Manager, Los Angeles ACO."

This commenter states that, as paragraph (c) of the AD is currently worded, it will cause an unnecessary operational impact since FAA-approved non-standard SRM or Service Rework Drawing repairs are known to exist in this area of the doorjamb. The commenter contends that obtaining approval for such repairs from the Los Angeles ACO, prior to further flight, will be time consuming and will result in an unwarranted extended ground time for the airplane.

The FAA does not concur with the commenter's request to revise paragraph (c) of the AD. The FAA, in conjunction with the manufacturer, has conducted further analysis of this issue. The FAA has determined that, for cargo doorjamb that are found to be modified previously, but not in accordance with the DC-9 SRM or Service Rework Drawing, an initial LFEC inspection of the fuselage skin adjacent to those existing repairs, as suggested by the commenter, will not detect any cracking under the repairs. The FAA considers that, once cracking emerges from under a repair, crack growth could rapidly occur. In light of these findings, no change to the final rule is necessary.

Request to Revise DC-9 Supplemental Inspection Document (SID)

One commenter requests that, prior to issuance of the final rule, the DC-9 SID be revised to incorporate the actions required by this AD. The commenter states that such a revision will eliminate confusion between the DC-9 SID and the AD. The FAA does not concur. The actions required by this AD are necessary to detect and correct the identified unsafe condition. After issuance of the final rule, the manufacturer may revise the DC-9 SID.

Other Relevant Rulemaking

The FAA has revised the final rule to include a new paragraph (e). This new paragraph states that accomplishment of the inspection requirements of this AD constitutes terminating action for inspections of Principal Structural Element (PSE) 53.09.035 [reference McDonnell Douglas Model DC-9 Supplemental Inspection Document, Report No. L26-008, Section 2 of Volume 1, Revision 5, dated July 1997, as required by AD 96-13-03, amendment 39-9671 (61 FR 31009, June 19, 1996)]. Since this new paragraph is being added, "NOTE 3" of the proposal, which discussed the relation of this AD to AD 96-13-03 is no longer necessary. Therefore, the FAA has removed "NOTE 3" of the proposal and renumbered the NOTES in the final rule accordingly.

Other Changes to the Final Rule

Based on new information received from the manufacturer, the FAA has revised the cost estimate for parts that would be needed if an operator were to find it necessary to accomplish the modification specified in this final rule. The Cost Impact section of the NPRM stated that the

estimated cost for those parts would be \$692 to \$990 per airplane. The revised figure for the estimated parts cost is \$936 to \$2007 per airplane. The final rule has been revised accordingly.

Conclusion

After careful review of the available data, including the comments noted above, the FAA has determined that air safety and the public interest require the adoption of the rule with the changes previously described. The FAA has determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD.

Cost Impact

There are approximately 899 McDonnell Model DC-9-10, -20, -30, -40, and -50 series airplanes, and C-9 (military) airplanes of the affected design in the worldwide fleet. The FAA estimates that 622 airplanes of U.S. registry will be affected by this AD.

It will take approximately 1 work hour per airplane to accomplish the required visual inspection, at an average labor rate of \$60 per work hour. Based on these figures, the cost impact of the visual inspection required by this AD on U.S. operators is estimated to be \$37,320, or \$60 per airplane.

The cost impact figures discussed above are based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted.

Should an operator be required to accomplish the eddy current inspections, it will take approximately 1 work hour per airplane to accomplish, at an average labor rate of \$60 per work hour. Based on these figures, the cost impact of the eddy current inspections required by this AD on U.S. operators is estimated to be \$37,320, or \$60 per airplane.

Should an operator be required to accomplish the modification, it will take approximately 14 work hours per airplane to accomplish, at an average labor rate of \$60 per work hour. Required parts would cost approximately \$936 or \$2,807 per airplane, depending on the service kit purchased. Based on these figures, the cost impact of the modification required by this AD on U.S. operators is estimated to be \$1,776 or \$3,647 per airplane.

Regulatory Impact

The regulations adopted herein will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption ADDRESSES.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

AIRWORTHINESS DIRECTIVE

Aircraft Certification Service
Washington, DC



U.S. Department
of Transportation
**Federal Aviation
Administration**

We post ADs on the internet at "www.faa.gov"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

CORRECTION: [*Federal Register: September 10, 1999 (Volume 64, Number 175); Page 49080-49082; www.access.gpo.gov/su_docs/aces/aces140.html*]

99-15-05: McDonnell Douglas: Amendment 39-11224. Docket 97-NM-49-AD.

Applicability: Model DC-9-10, -20, -30, -40, and -50 series airplanes, and C-9 (military) airplanes, as listed in McDonnell Douglas DC-9 Service Bulletin DC9-53-278, dated November 4, 1996, or McDonnell Douglas DC-9 Service Bulletin DC9-53-278, Revision 01, dated April 29, 1999; certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (f) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To detect and correct fatigue cracking in the fuselage skin or doubler at the corners of the aft lower cargo doorjamb, which could result in rapid decompression of the fuselage and consequent reduced structural integrity of the airplane, accomplish the following:

Note 2: Where there are differences between the service bulletin and the AD, the AD prevails.

(a) Prior to the accumulation of 48,000 total landings, or within 3,575 landings after the effective date of this AD, whichever occurs later, perform a one-time visual inspection to determine if the corners of the aft lower cargo doorjamb have been modified prior to the effective date of this AD.

(b) If the visual inspection required by paragraph (a) of this AD reveals that the corners of the aft lower cargo doorjamb have not been modified: Prior to further flight, perform a low frequency eddy current (LFEC) or x-ray inspection to detect cracks of the fuselage skin and doubler at all corners of the aft lower cargo doorjamb, in accordance with McDonnell Douglas Service Bulletin DC9-53-278, dated November 4, 1996, or Revision 01, dated April 29, 1999.

(1) If no crack is detected during the LFEC or x-ray inspection required by this paragraph, accomplish the requirements of either paragraph (b)(1)(i) or (b)(1)(ii) of this AD.

(i) Option 1. Repeat the inspections as follows until paragraph (b)(1)(ii) of this AD is accomplished:

(A) If the immediately preceding inspection was conducted using LFEC techniques, conduct the next inspection within 3,575 landings.

(B) If the immediately preceding inspection was conducted using x-ray techniques, conduct the next inspection within 3,075 landings.

(ii) Option 2. Prior to further flight, modify the corners of the aft lower cargo doorjamb, in accordance with either service bulletin. Prior to the accumulation of 28,000 landings after accomplishment of that modification, perform a High Frequency Eddy Current (HFEC) inspection to detect cracks on the skin adjacent to the modification, in accordance with McDonnell Douglas Service Bulletin DC9-53-278, Revision 01, dated April 29, 1999. Repeat the HFEC inspection thereafter at intervals not to exceed 20,000 landings.

(A) If no crack is detected on the skin adjacent to the modification during any HFEC or x-ray inspection required by paragraph (b) of this AD, repeat the HFEC inspection thereafter at intervals not to exceed 20,000 landings.

(B) If any crack is detected on the skin adjacent to the modification during any HFEC or x-ray inspection required by this paragraph, prior to further flight, repair it in accordance with a method approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate.

(2) If any crack is found during any LFEC or x-ray inspection required by paragraph (b) of this AD and the crack is 2 inches or less in length: Prior to further flight, modify it in accordance with McDonnell Douglas Service Bulletin DC9-53-278, Revision 01, dated April 29, 1999. Prior to the accumulation of 28,000 landings after accomplishment of the modification, perform an HFEC inspection to detect cracks on the skin adjacent to the modification, in accordance with the service bulletin.

(i) If no crack is detected during the HFEC inspection required by this paragraph, repeat the HFEC inspection thereafter at intervals not to exceed 20,000 landings.

(ii) If any crack is detected during the HFEC inspection required by this paragraph, prior to further flight, repair it in accordance with a method approved by the Manager, Los Angeles ACO.

(3) If any crack is found during any LFEC or x-ray inspection required by this paragraph and the crack is greater than 2 inches in length: Prior to further flight, repair it in accordance with a method approved by the Manager, Los Angeles ACO.

(c) If the visual inspection required by paragraph (a) of this AD reveals that the corners of the aft lower cargo doorjamb have been modified, but not in accordance with the DC-9 Structural Repair Manual (SRM) or Service Rework Drawing, prior to further flight, repair it in accordance with a method approved by the Manager, Los Angeles ACO.

(d) If the visual inspection required by paragraph (a) of this AD reveals that the corners of the aft lower cargo doorjamb have been modified in accordance with DC-9 SRM or Service Rework Drawing, prior to the accumulation of 28,000 landings since accomplishment of that modification, or within 3,575 landings after the effective date of this AD, whichever occurs later, perform a HFEC inspection to detect cracks on the skin adjacent to the modification, in accordance with McDonnell Douglas Service Bulletin DC9-53-278, Revision 01, dated April 29, 1999. Repeat the HFEC inspection thereafter at intervals not to exceed 20,000 landings.

(1) If no crack is detected during any HFEC inspection required by this paragraph, repeat the HFEC inspection thereafter at intervals not to exceed 20,000 landings.

(2) If any crack is detected during any HFEC inspection required by this paragraph, prior to further flight, repair it in accordance with a method approved by the Manager, Los Angeles ACO.

(e) Accomplishment of the actions required by this AD constitutes terminating action for inspections of Principal Structural Element (PSE) 53.09.035 (reference McDonnell Douglas Model DC-9 Supplemental Inspection Document, Report No. L26-008, Section 2 of Volume 1, Revision 5, dated July 1997, as required by AD 96-13-03, amendment 39-9671).

Alternative Methods of Compliance

(f) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

Note 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

Special Flight Permits

(g) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(h) Except as provided by paragraphs (b)(1)(ii)(B), (b)(2)(ii), (b)(3), (c), and (d)(2) of this AD, the actions shall be done in accordance with McDonnell Douglas Service Bulletin DC9-53-278, dated November 4, 1996, and McDonnell Douglas Service Bulletin DC9-53-278, Revision 01, dated April 29, 1999. This incorporation by reference was approved previously by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51 as of August 18, 1999 (64 FR 37838, July 14, 1999). Copies may be obtained from The Boeing Company, Douglas Products Division, P.O. Box 1771, Long Beach, California 90846-1771, Attention: Business Unit Manager, Contract Data Management, C1-255 (35-22). Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(i) The effective date of this amendment remains August 18, 1999.

Issued in Renton, Washington, on September 3, 1999.

Dorenda D. Baker,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 99-23472 Filed 9-9-99; 8:45 am]

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